



Casella 120 Acoustic Calibrator



Actual Size

The Smallest Acoustic
Calibrator in the World

System Features

- Compliant with IEC 60942: 2003 and ANSI S1.40:2006
- Class 1 & 2 accuracy versions
- Digital technology ensures highly stable acoustic performance
- Dual calibration level (Class 1 version) of 94dB and 114dB at 1kHz
- Rugged, ergonomic design
- Simple to use with incorrect microphone insertion warning
- Automatic power off to conserve life of battery, typically 2 years

Overview

The Casella 120 Acoustic Calibrator is the smallest of its type in the world; with a rugged, over-moulded design for use in field environments.

The field calibration of Sound Level Meters is an essential procedure when carrying out any type of noise survey both before and after each measurement sequence. This ensures that instruments are providing consistently accurate readings necessary for monitoring to ensure compliance with workplace and environmental noise regulations.

The 120 is therefore designed and manufactured to comply with the requirements of IEC 60942: 2003 and ANSI S1.40: 2006. These standards stipulate accurate calibration over a wide range of temperature, humidity and pressure conditions, typical of field work, ensuring accurate calibration in all conditions.

Digital technology for optimum accuracy

The 120 is compact and ergonomically designed with simplicity and ease of use being the highest priorities. Key features include a simple keypad for intuitive control, permitting calibration level changes when required. When used with instruments like the -62X series, calibration routines commence automatically as soon as a calibration tone is detected to further simplify the task.

The 120 uses a MEMS microphone and a digital feedback loop to maintain the acoustic pressure in the cavity at the required level. An indicator shows if the sound level meter microphone is incorrectly inserted into the cavity, removing any potential for calibration error.

The microprocessor control detects when the microphone is removed and automatically switches off the calibration tone. This conserves battery power, allowing batteries to last for up to 2 years of operation.

Both the CEL-120/1 and CEL-120/2 calibrator accept all industry standard 1/2" microphone capsules. Smaller 1/4" microphones may be accommodated using the 1/2" to 1/4" adaptor (CEL-4726). The relevant 120 also comes as standard with our range of noise monitoring kits.

Technical Specification

General

Type:	CEL-120/1: Calibrator to EN (IEC) 60942: 2003, ANSI S1.40: 2006 Class 1 CEL-120/2: Calibrator to EN (IEC) 60942: 2003, ANSI S1.40: 2006 Class 2
Calibration sound pressure level (over environmental range):	CEL-120/1: 114.0dB ±0.4dB and 94.0dB ±0.4dB CEL-120/2: 114.0dB ±0.6dB
Calibration level (at reference conditions):	CEL-120/1: 114.0 dB ±0.25 dB and 94.0 dB ±0.25 dB, CEL-120/2: 114.0 dB ±0.35 dB
Calibration Frequency:	1kHz ±1Hz
Harmonic Distortion:	Less than 1.0%
Battery:	2 x 1.5V AAA (LR03)
Battery life:	A typical operational life of 2 years
Dimensions:	75.5 x 54.0 x 37.0mm (2.9 x 2.1 x 1.4")
Weight:	85g (0.19lb) including batteries

Ordering Information

CEL-120/1 Dual level (94dB and 114dB) Class 1 Calibrator. Including batteries, operating instructions and calibration certificate.

CEL-120/2 114dB Class 2 Calibrator. Including batteries, operating instructions and calibration certificate.

Optional

CEL-4726 1/4" to 1/2" coupler for CEL-120 calibrator.



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SM11002 v1.0